



University  
Mohammed I



Physique de la Matière et  
des Rayonnements



Faculty of Sciences  
Oujda

# ***ATLAS Forward Calorimeter's Analysis : Electrons-Sshape***

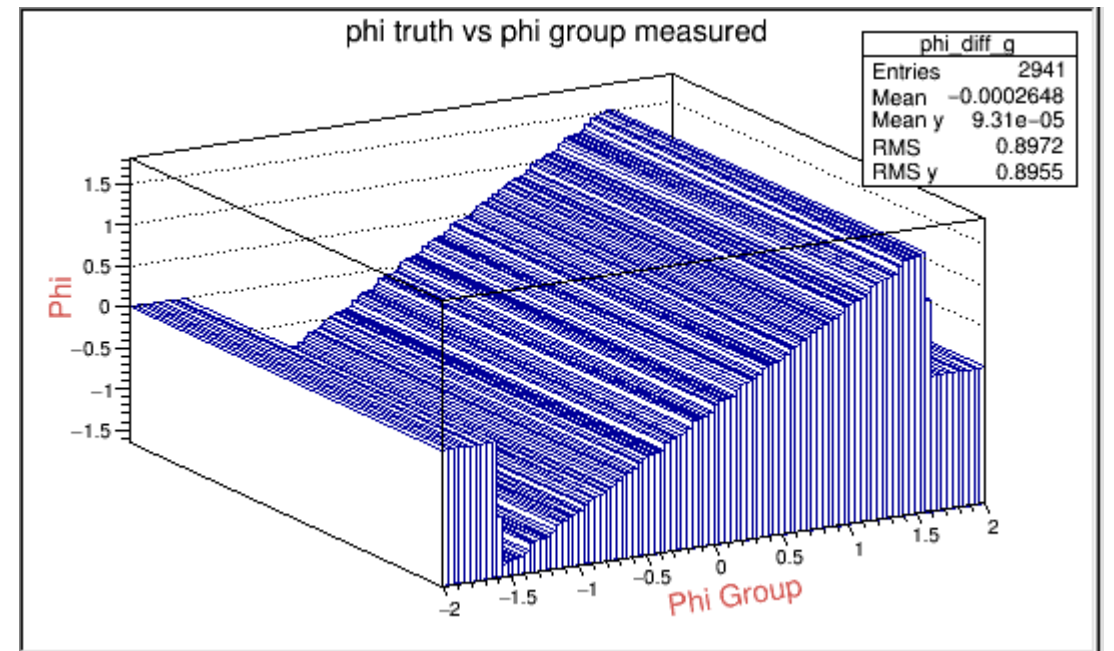
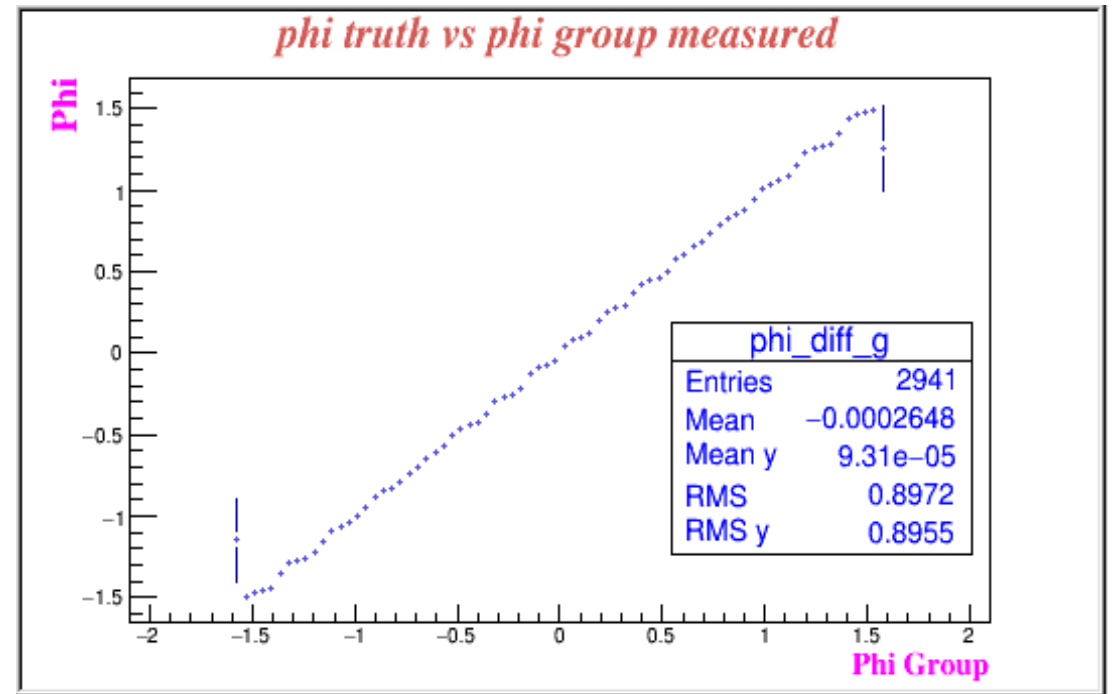
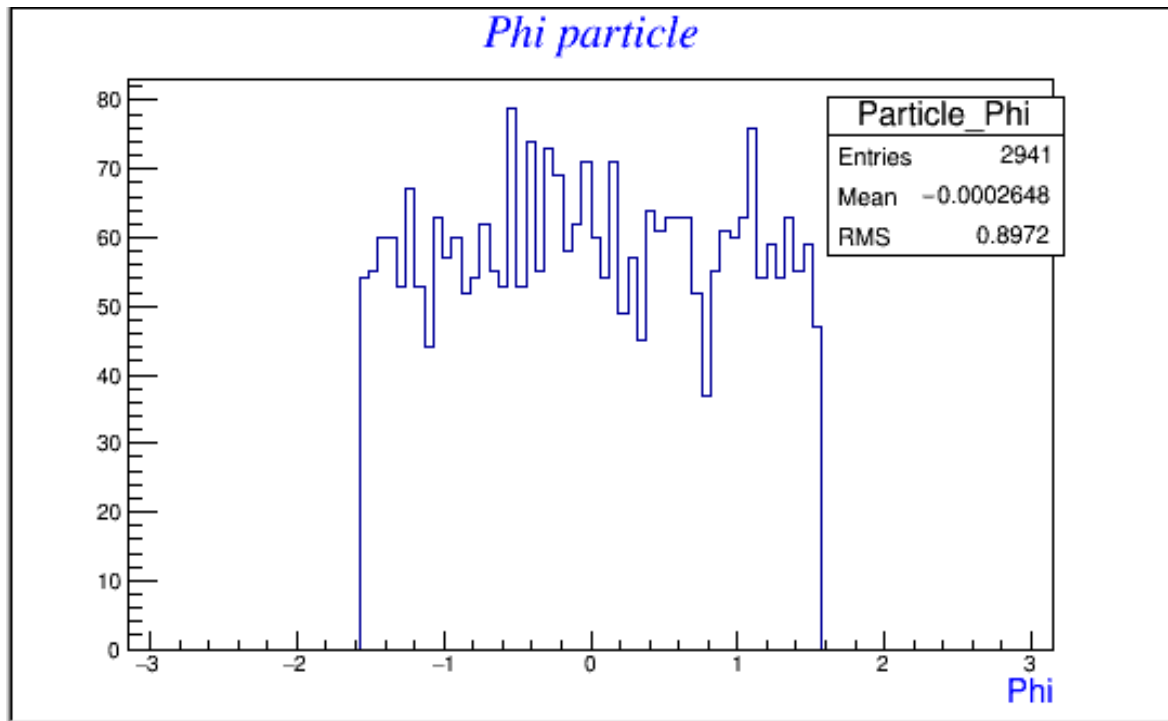
*KTH/ FSO meeting  
07/ 01/ 2016*

Malika TOUIL – Yahya TAYALATI



# Electrons 100 GeV

$$4.1 < \eta_{\text{truth}} < 4.2$$

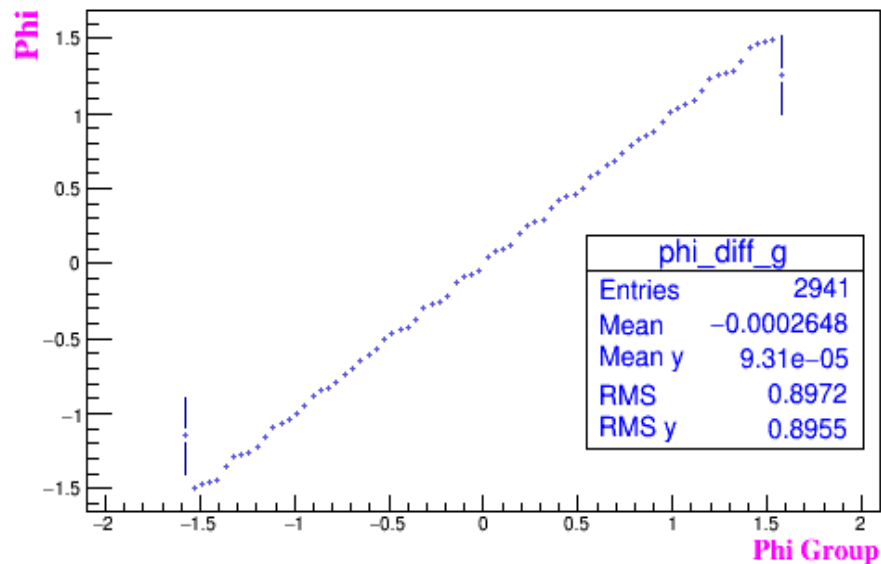




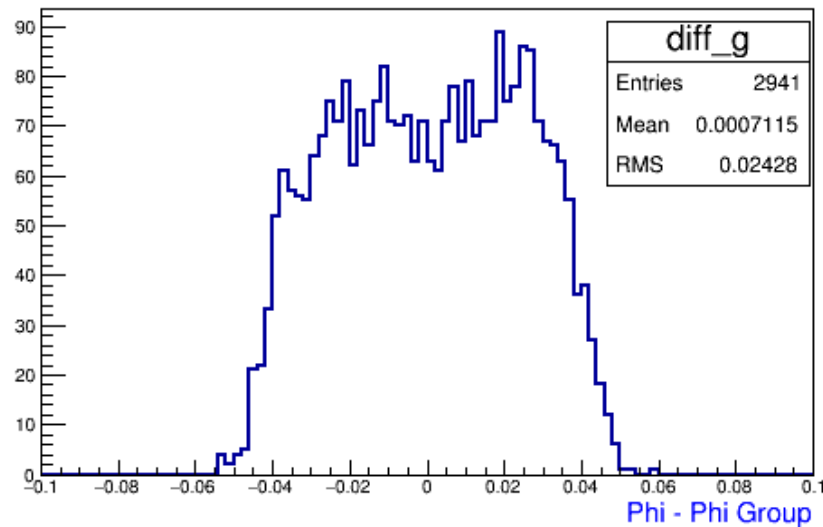
# Electrons 100 GeV

$4.1 < \eta_{\text{truth}} < 4.2$

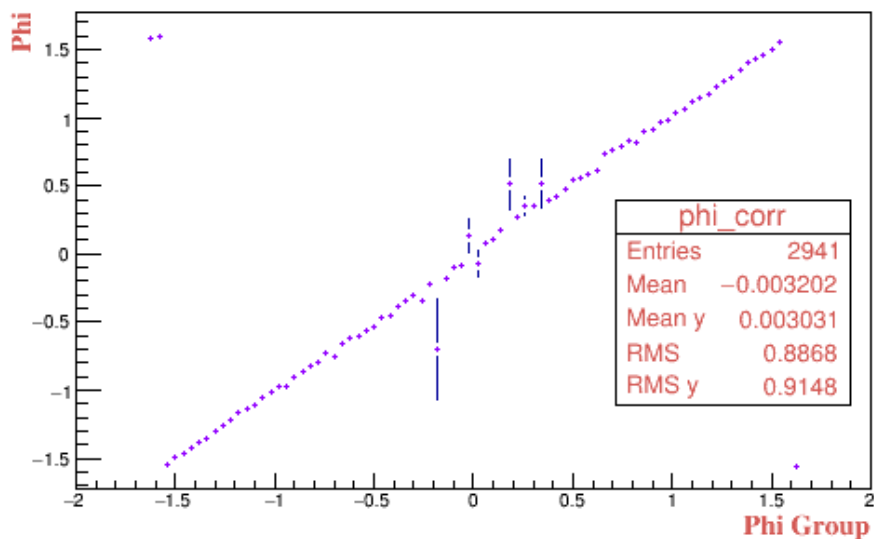
*phi truth vs phi group measured*



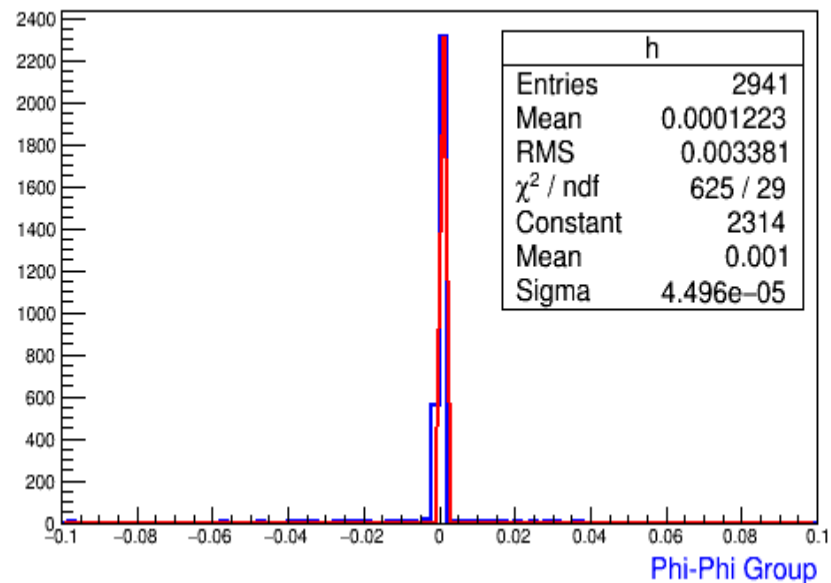
Diff Phi-Phi group



Correction of phi vs Phi Group



correction phi\_phigroup



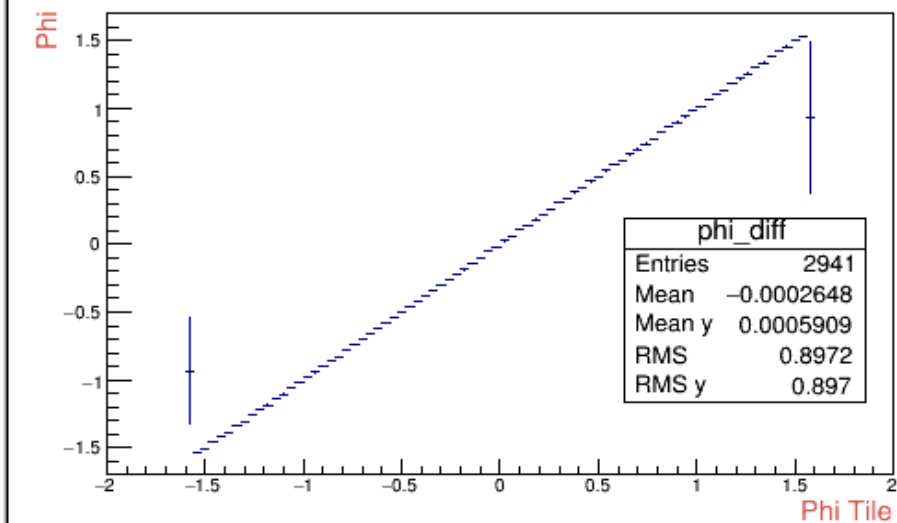
$\sigma_{\phi} = 0.45 \text{ mrad}$



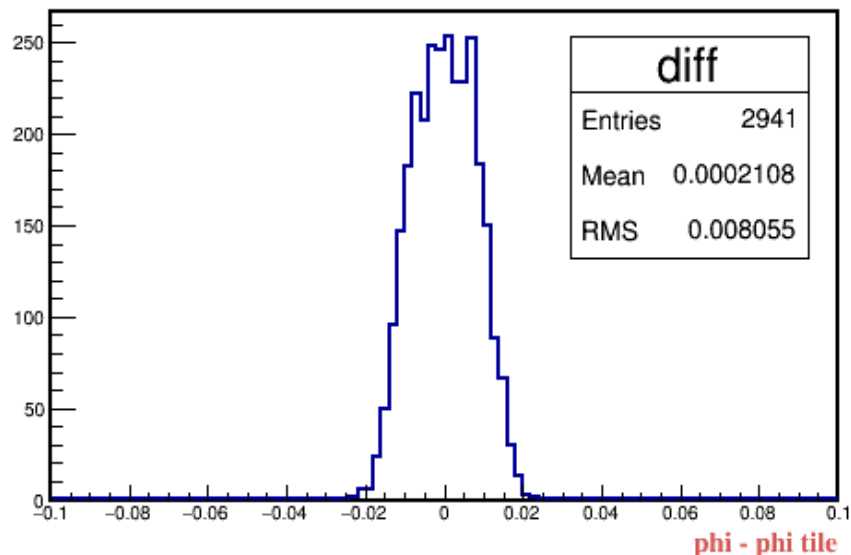
# Electrons 100 GeV

$4.1 < \eta_{\text{truth}} < 4.2$

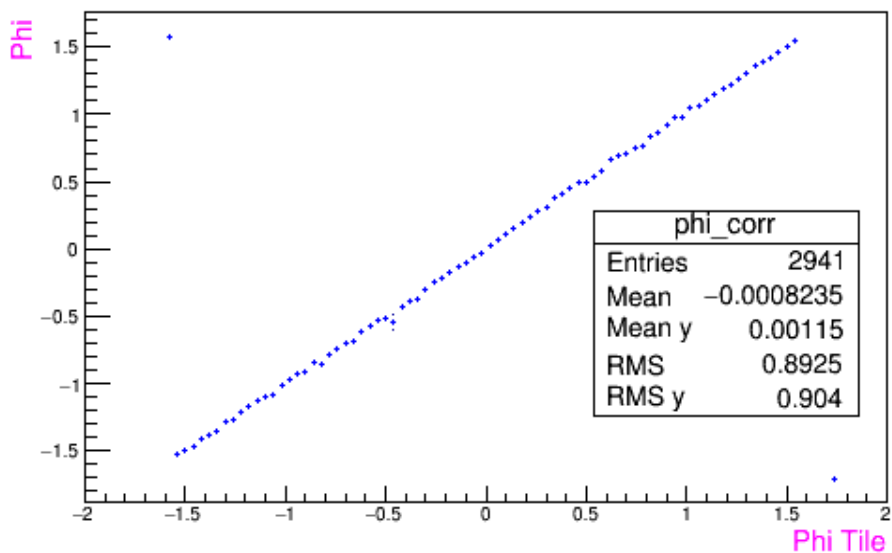
phi truth vs phi tile measured



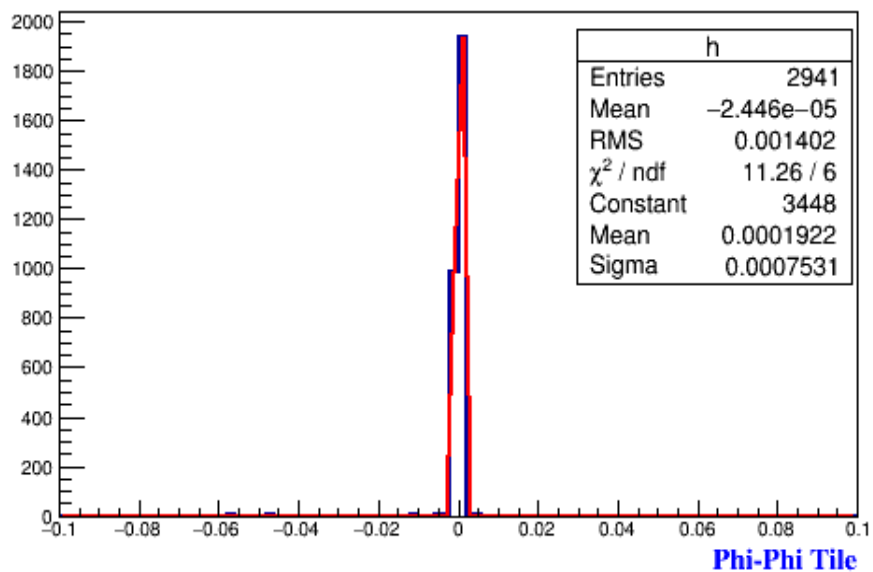
Diff Phi-Phi Tile



Correction of Phi vs Phi Tile



Correction phi-phi Tile



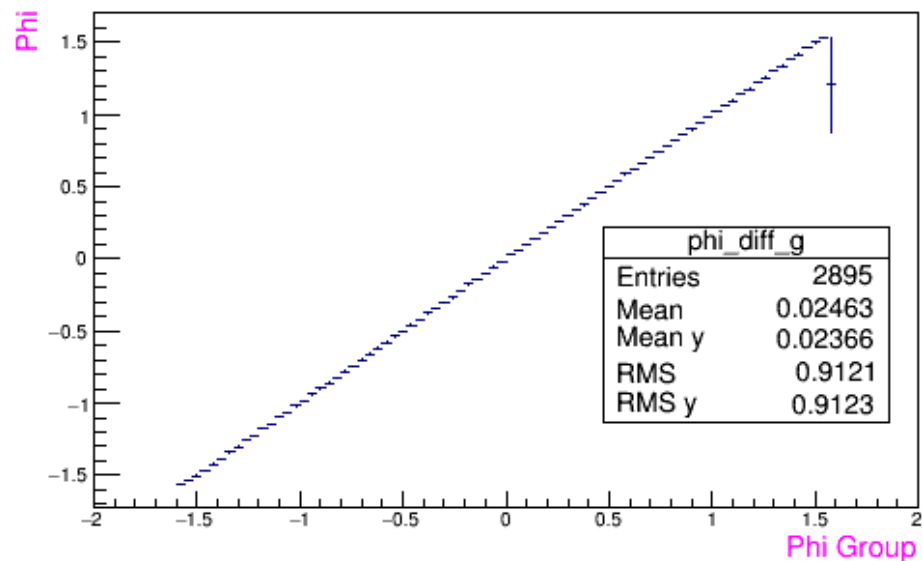
$\sigma_{\phi} = 0.75 \text{ mrad}$



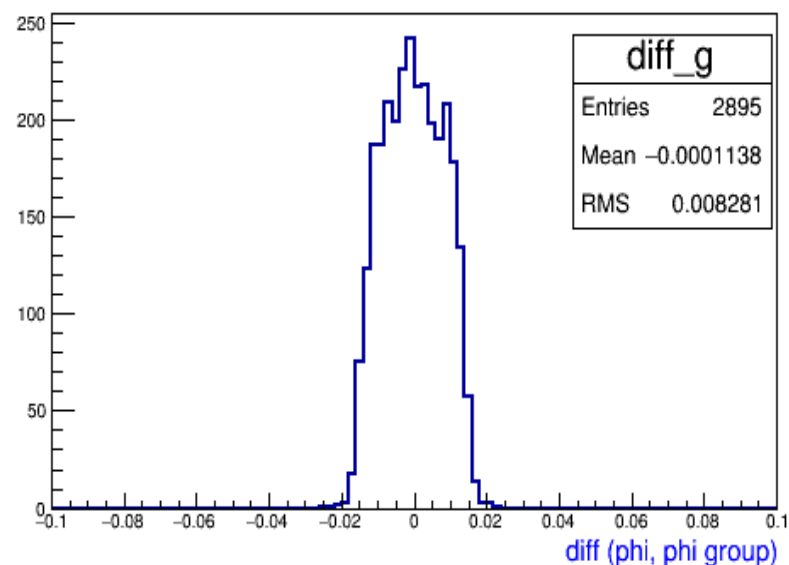
# Electrons 100 GeV

## $3.1 < \eta_{\text{truth}} < 3.2$

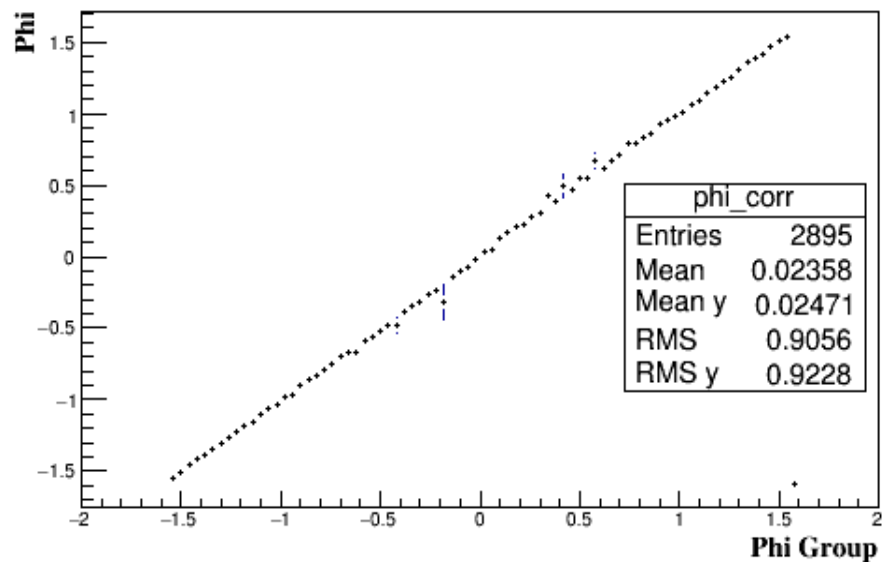
### phi truth vs phi group measured



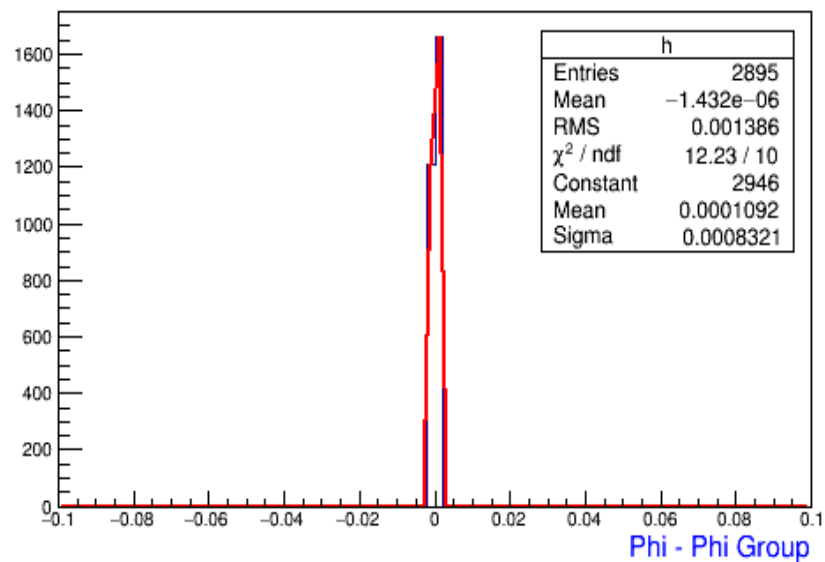
### Diff Phi-Phi group



### correction of phi vs phi group



### Correction phi-phi group



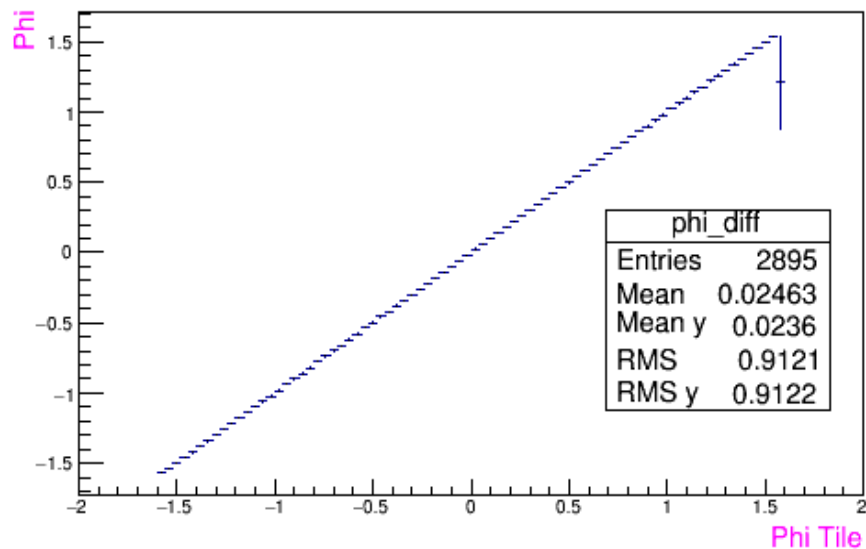
$$\sigma_{\phi} = 0.83 \text{ mrad}$$



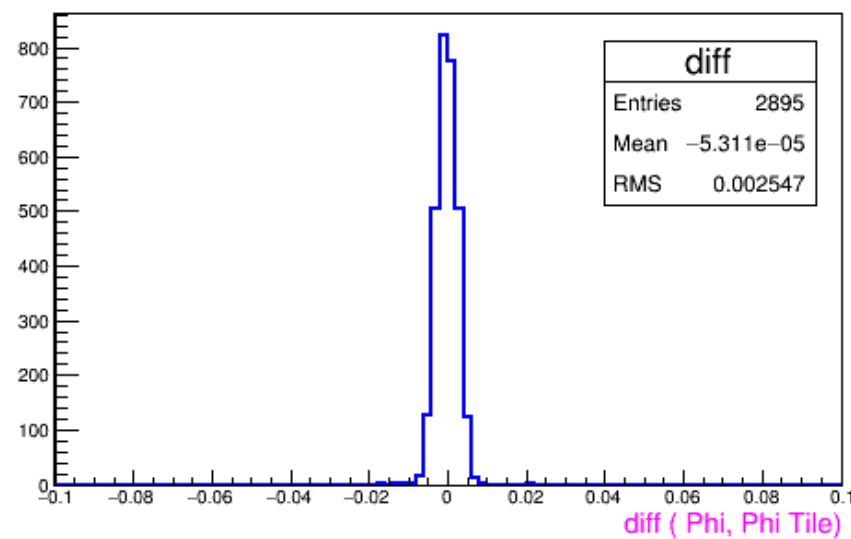
# Electrons 100 GeV

## $3.1 < \eta_{\text{truth}} < 3.2$

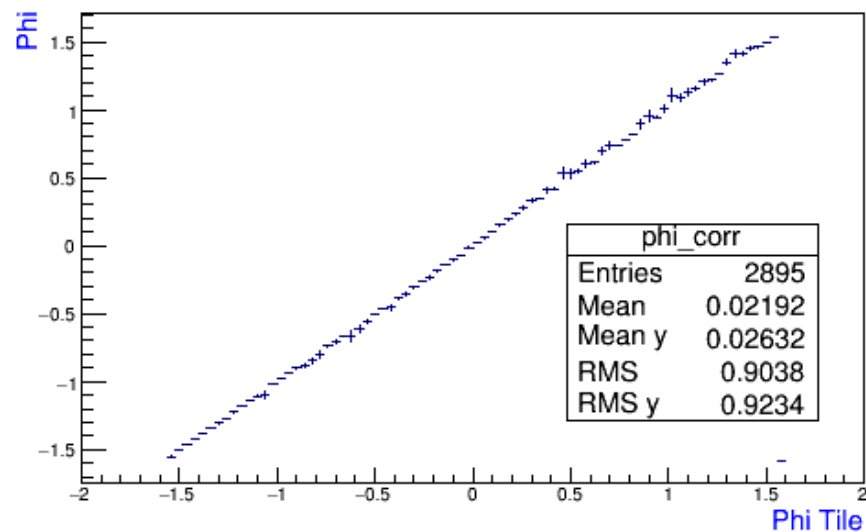
### phi truth vs phi tile measured



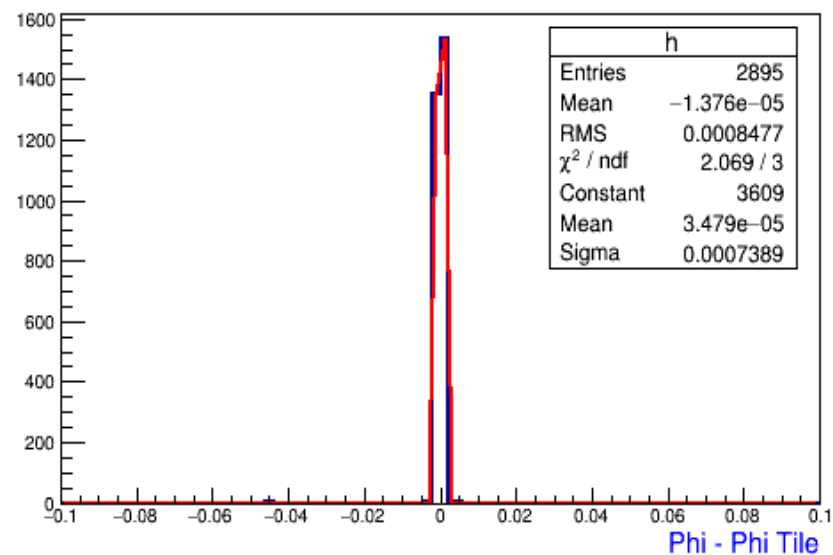
### Diff Phi-Phi Tile



### correction of phi vs phi tile



### Correction Phi-Phi Tile



$$\sigma_{\phi} = 0.73 \text{ mrad}$$



*Thank you*

